

Comments filed regarding RM-11306
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I am concerned that the regulation-by-bandwidth proposed in RM-11306 does not have provisions for separating human-decodable signals from those requiring a microprocessor or computer as an intermediate step.

I think that in ideal conditions, where an occupied band is uncrowded enough to support all of those that wish to use it with appropriate channel separation, there is no problem. Adjacent signals, whatever they are, can be filtered out with appropriate analog or DSP filters, and all operators are happy.

However, in the case that signals overlap somewhat, the mixture of human-decodable and non-human-decodable modes in the same passband will lead to more interference to the human-decodable modes than if only human-decodable modes were present.

I have found in ten years of amateur radio experience, that it is more difficult to mentally tune out unintelligible bursts of data than it is to ignore an interfering voice or Morse code transmission. Regulation-by-bandwidth does not take into account the adaptive filtering that the human brain uses when listening hard for a signal among many. I don't have any non-anecdotal support for this, but it concerns me that it has not been considered in this proposal.

In addition, innovation in digital modes on the amateur bands drives them to be faster and more interference-resistant. The more interference-resistant they are, the less likely operators are going to even notice that adjacent analog stations exist. This will add to the inequity between human-decodable modes and those that require hardware, in that there is little penalty for the digital voice and data operators to get in close to analog signals, but there is worse-than-usual penalty for the analog users.

For this reason, I would propose distinct segments of the band for human-decodable and non-human-decodable emissions, and I do not think that RM-11306 should be adopted unless this issue is addressed.

